Appln. No. 10/715,803
Docket No. GP-303124/GM2-0075

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (currently amended) A self locking apparatus comprising:

a housing;

a load initiating element located within the housing so as to provide an axial frictional force between the load initiating element and the housing;

a spring located adjacent to the load initiating element, and configured to expand in compression against the housing in response to a compressive load; and

a compression member slideably disposed within the housing and configured to compress the spring from a side opposite the load initiating element, the spring being disposed between the compression member and the load initiating element;

~~wherein~~ the load initiating element, spring, and compression member ~~are~~ being slideable within the housing in a first axial direction and in a second opposite axial direction in response to an axial load on the load initiating element in each of the first and second directions, respectively, and lockable within the housing in the second axial direction in response to an axial load on the compression member in the second axial direction;

the load initiating element being disposed to resist a force exerted by the compression member acting on the spring in a compressive manner in the second direction.

2. (original) The self locking apparatus of claim 1, wherein the housing is an outer tube.

3. (previously presented) The self locking apparatus of claim 2, wherein the compression member comprises an inner tube slideably positioned within the outer tube.

4. (previously presented) The self locking apparatus of claim 3 further comprising:

a pin rigidly attached to the inner tube and slideably attached to the spring; and

a piston slideably attached to the pin, wherein the piston and the pin slide relative to each other in the first direction, and wherein the piston is restrained by the pin in the second direction;

wherein the load initiating element via the axial frictional force is resistive to movement relative to a longitudinal axis of the housing; and

wherein the piston, load initiating element, and pin are configured to slide the spring and inner tube within the outer tube in the first and second axial directions in response to an axial load on the piston sufficient to overcome the resistance to movement without loading the spring into a self locking mode.

5-6. (canceled)

7. (original) The self locking apparatus of claim 1, wherein the spring is a wave spring.

8. (original) The self locking apparatus of claim 1, wherein the spring is a conic spring.

9. (original) The self locking apparatus of claim 8, wherein the conic spring is outwardly biased.

10. (original) The self locking apparatus of claim 1, wherein the spring comprises:

an initiator spring; and

a plurality of additional springs.

11. (original) The self locking apparatus of claim 10, wherein the plurality of additional springs comprise:

at least one intermediate load conic spring; and

at least one primary load conic spring.

12. (original) The self locking apparatus of claim 3, wherein the inner tube is in operable communication with a motor vehicle bumper, and the outer tube is in operable communication with a motor vehicle body.

13-22. (canceled)

23. (previously presented) The self locking apparatus of Claim 1, wherein:

the load initiating element via the axial frictional force is resistive to movement relative to a longitudinal axis of the housing;

the load initiating element, spring, and compression member are slideable within the housing in a first axial direction and in a second opposite axial direction in response to an axial load on the load initiating element sufficient to overcome the resistance to movement;

the load initiating element, spring, and compression member are slideable within the housing in the first axial direction in response to an axial load on the compression member in the first axial direction sufficient to overcome the resistance to movement; and

the load initiating element, spring, and compression member are lockable within the housing in the second axial direction in response to an axial load on the compression member in the second axial direction sufficient to compress the

spring against the housing, prior to the axial load overcoming the resistance to movement, with a locking force greater than the axial load, thereby defining a self locking mode.

24. (currently amended) A self locking apparatus comprising:

a housing;

a load initiating element located within the housing so as to provide an axial frictional force between the load initiating element and the housing, thereby providing a resistance to movement relative to a longitudinal axis of the housing;

a compression member slideably disposed within the housing relative to the longitudinal axis;

a spring disposed between the load initiating element and the compression member, and configured to expand in compression against the housing in response to a compressive load;

~~wherein~~ the load initiating element, spring, and compression member ~~are~~ being axially slideable within the housing in response to an axial load on the load initiating element sufficient to overcome the resistance to movement;

~~wherein~~ the load initiating element, spring, and compression member ~~are~~ being slideable within the housing in a first axial direction and lockable within the housing in a second axial direction in response to an axial load on the compression member in the first and second axial directions, respectively;

the load initiating element being disposed to resist a force exerted by the compression member acting on the spring in a compressive manner in the second direction.

25. (previously presented) The self locking apparatus of Claim 24, wherein the compression member is in operable communication with a motor vehicle bumper, and the housing is in operable communication with a motor vehicle body.

26. (currently amended) A self locking apparatus comprising:

a housing;

a load initiating element located within the housing so as to provide an axial frictional force between the load initiating element and the housing;

a spring located adjacent to the load initiating element, and configured to expand in compression against the housing in response to a compressive load; and

a compression member slideably disposed within the housing and configured to compress the spring from a side opposite the load initiating element;

~~wherein~~ the load initiating element, spring, and compression member ~~are~~ being axially slideable in a first and a second axial direction within the housing in response to an axial load on the load initiating element sufficient to overcome the axial frictional force; ~~and~~

~~wherein~~ the load initiating element, spring, and compression member ~~are~~ being lockable within the housing in the second axial direction in response to an axial load on the compression member in the second axial direction;

the load initiating element being disposed to resist a force exerted by the compression member acting on the spring in a compressive manner in the second direction.

27. (previously presented) The self locking apparatus of claim 26, further comprising:

a pin rigidly attached to the compression member and slideably attached to the spring; and

a piston slideably attached to the pin, wherein the piston and the pin slide relative to each other in the first direction, and wherein the piston is restrained by the pin in the second direction;

wherein the load initiating element via the axial frictional force is resistive to movement relative to a longitudinal axis of the housing; and

wherein the piston, load initiating element, and pin are configured to slide the

spring and compression member within the housing in the first and second axial directions in response to an axial load on the piston sufficient to overcome the resistance to movement without loading the spring into a self locking mode.

28. (new) The self locking apparatus of claim 1, wherein:

the spring is disposed to receive a compressive load from the compression member, and to transfer at least a portion of the compressive load to the load initiating element.